(19) 世界知的所有権機関 国際事務局



(43) 国際公開日 2005 年4 月28 日 (28.04.2005)

PCT

(10) 国際公開番号 WO 2005/039211 A1

(51) 国際特許分類7:

H04Q 7/24

(21) 国際出願番号:

PCT/JP2004/015602

(22) 国際出願日:

2004年10月21日(21.10.2004)

(25) 国際出願の言語:

日本語

(26) 国際公開の言語:

日本語

(30) 優先権データ: 特願 2003-360163

2003年10月21日(21.10.2003)

- (71) 出願人 (米国を除く全ての指定国について): 日本電気 株式会社 (NEC CORPORATION) [JP/JP]; 〒1088001 東京都港区芝五丁目7番1号 Tokyo (JP).
- (72) 発明者: および
- (75) 発明者/出願人 (米国についてのみ): 菊地 庸之

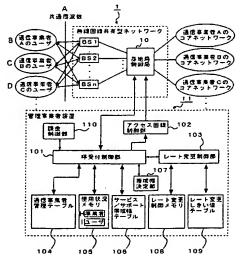
(KIKUCHI, Tsuneyuki) [JP/JP]; 〒1088001 東京都港 区芝五丁目7番1号日本電気株式会社内 Tokyo (JP).

- (74) 代理人: 丸山 隆夫 (MARUYAMA, Takao); 〒1700013 東京都豊島区東池袋 2-38-23 SAMビル 3階 丸山特許事務所 Tokyo (JP).
- (81) 指定国 (表示のない限り、全ての種類の国内保護が 可能): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) 指定国(表示のない限り、全ての種類の広域保護が可 能): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), ユーラシア (AM, AZ, BY,

/続葉有/

(54) Title: WIRELESS-LINE-SHARED NETWORK SYSTEM, AND MANAGEMENT APPARATUS AND METHOD THERE-FOR

(54) 発明の名称: 無線回線共有型ネットワークシステム、その管理装置および方法



- SHARED FREQUENCIES
- B... USERS OF COMMUNICATION PROVIDER A
- USERS OF COMMUNICATION PROVIDER B D. USERS OF COMMUNICATION PROVIDER C
- WIRELESS-LINE-SHARED NETWORK
- 10... BASE STATION CONTROL STATION
- .. CORE NETWORK OF COMMUNICATION PROVIDER A CORE NETWORK OF COMMUNICATION PROVIDER B
- CORE NETWORK OF COMMUNICATION PROVIDER C
- 11...MANAGEMENT PROVIDER APPARATUS
- 110...CHARGE CONTROL PART
- 102...ACCESS LINE CONTROL PART 101...CALL ACCEPTANCE CONTROL PART
- 103...RATE CHANGE CONTROL PART 107...BANDWIDTH DECISION PART
- 104...COMMUNICATION PROVIDER MANAGEMENT TABLE
- 105...USE STATUS MEMORY
- H...PROVIDERS
- LUSERS
- 106...SERVICE/SUPPORT BANDWIDTH TABLE
- 108...RATE CHANGE CONTROL MEMORY
- 109...RATE CHANGE THRESHOLD VALUE TABLE

(57) Abstract: A wireless-line-shared network system capable of charging in accordance with use of a wireless communication network so as to reduce the investment costs of communication providers. The user terminals of the communication providers use radio frequencies, which are permitted by authorities, to connect with the corresponding communication provider networks via radio base stations (BS) and a control station (10). In response to call connection requests, a call acceptance control part (101) performs base stations (BS) and a control station (10). In response to call connection requests, a call acceptance control part (101) performs call acceptances and band managements based on wireless band allocation patterns, which established by subscriptions, and based on current use statuses. A bandwidth decision part (107) decides bandwidths for the call connection requests by use of the call connection requests, call connection responses and a bandwidth table (106). A rate change control part (103) adjusts the bandwidths of the user terminals such that the currently used bandwidths of the communication providers are kept within predetermined ranges. A charge control part (110) charges the communication providers in accordance with their wireless band rental subscriptions.